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A STORY *of* COTTON



BY
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MEMPHIS TERMINAL CORPORATION
MEMPHIS, TENN.

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A STORY OF COTTON

The planting of cotton, usually begins, in the SOUTHERN portion of the cotton producing area of the United States, as early as the last of February; and, by the last of March in the locality mentioned, the cotton is usually ALL planted.

In the NORTHERN portion, the planting of cotton, is fairly under way in the month of April.

In the southern area, under ordinary conditions, cotton matures, and picking begins, and the marketing of cotton starts, about the first of July.

In the more northern latitudes, ordinarily, cotton begins to mature and starts being marketed, during the month of August.

If the weather permits, the cotton markets of Texas, southern Louisiana, southern Alabama, Georgia and southern South Carolina assume activity, and the receipts of cotton begin to be rather GENEROUS, by the first week in August.

In the more northern latitudes of the cotton district, it is usually about the middle of September, before an ACTIVE marketing of cotton is in evidence.

When the cotton bolls begin to open and mature, the bolls at the BOTTOM of the stalk, are the first to open, and picking begins in each field, or SHOULD begin in each field, when there is a sufficient amount of cotton termed "THE BOTTOM CROP" matured, to insure a bale of lint cotton of, approximately, 500 pounds in weight as a result of this picking.

All maturity of cotton BEGINS at the bottom of the cotton stalk, and, from the first day of this maturity, there is CONSTANTLY in evidence, on every stalk of cotton, beginning at the top of the stalk:

The bloom,

The square,

The small boll.

The large boll,

The open boll.

The matured cotton ready to be picked.

This display is in evidence, AT ALL TIMES, each year, after the opening of the FIRST BOLL.

The stalk continues to grow, the limbs of the stalk continue to grow and leaf, the blossoms continue to make, the matured bolls are constantly bursting, and the raw, unpicked cotton is in evidence, constantly, until a killing frost, that usually occurs about the 25th of October or the 1st of November, stops the FURTHER GROWTH of the cotton stalk or plant.

The blooms on the stalk fade and die by virtue of this killing frost.

The squares that are frostbitten no longer produce a boll, but are shed from the stalk, and, it sometimes occurs, that the VERY YOUNG BOLLS are also affected; but, ordinarily, the bolls that are somewhat advanced, unless a FREEZE occurs, will grow and mature.

Shortly after a killing frost, and after ALL of the leaves have fallen, the sun's rays then have an uninterrupted chance to shine on EVERY boll on the stalk and the bolls open and mature, much more rapidly than when the bolls were shaded by the large leaves.

Thus, one will see that an EARLY FROST has a very definite bearing on the cotton production, which, up to the time of the frost, always PROMISES a production of cotton from each bloom that is in evidence.

When the bottom bolls are rapidly bursting, and the entire field is white with cotton, at the bottom of the stalk, the grower becomes very busy gathering his cotton crop.

If he grows a very small field of cotton, he, with his wife and all of his family, that are old enough to pick cotton, will, very industriously, start picking cotton daily.

Those who cultivate plantations on a very large scale, engage cotton pickers, at, usually, a very exorbitant figure, to pick this cotton that is daily, very rapidly opening and maturing, which, if not picked, may fall to the ground, and, when gathered, produce the lower grades of cotton.

The payment to the cotton picker, is, usually, made according to the number of pounds he or she gathers, during the day.

The cotton picker picks the cotton from the boll by hand, boll by boll, and places the cotton, which is termed "SEED COTTON," in a long sack or bag, that is strapped to his or her shoulders and is dragged behind the picker.

A professional cotton picker, at the rate of \$1.75 per cwt. can, if industrious, earn a daily wage of \$3.50.

A cotton picker delivers the bag of cotton so picked to the overseer of the plantation who weighs the cotton and credits the picker with the number of pounds that is in evidence for each day's work.

As the "Cotton Seed" is weighed in conjunction with the cotton lint and credited to the cotton picker, and, as the seed is of very heavy weight, the number of pounds picked in one day, often, becomes very great.

We now have the cotton picked by TWO classes of pickers:

- 1st. The cotton that is picked by the small grower for his OWN account.
- 2nd. The cotton that is picked by hired labor for those who conduct large cotton plantations.

The man who cultivates the small cotton patch, if his cotton patch produces LESS than a bale, usually takes the "SEED COTTON" picked during the day, and deposits it on his front porch.

If he is in need of money, he will probably sell it as "SEED COTTON" to a neighbor, or to a cotton ginner, so as to QUICKLY realize CASH, on the result of his day's work.

If the small producer aspires to raising one or several bales of cotton, on his individual land, he will usually wait until there is an accumulation of "SEED COTTON" of sufficient quantity to load into a wagon, which wagon usually holds about 1,600 pounds, which, when ginned, will produce one bale of lint cotton approximately 500 pounds.

The load of "SEED COTTON" is then hauled to a LARGER planter nearby, or to a PUBLIC GINNER, who, for so much "per bale," will gin the load of "SEED COTTON" for the small producer and will either purchase the seed that is separated from the lint by ginning, and buy the bale of lint cotton outright, from the producer, or, he will return the seed to the

small producer, who, after his bale of cotton has been ginned, will load the wagon with the seed that has been separated from the lint, and place the finished product, of the BALE of "LINT COTTON" upon the loose seed, and start to a neighboring town to sell the bale of cotton to a storekeeper, or to the representative of a Cotton Buyer.

These representatives are usually in evidence at ALL small towns throughout the cotton belt as soon as the cotton season opens.

Often, if he disposes of the bale of cotton to a storekeeper, he receives, in payment, a part in cash, and a part in trade, by purchasing from this storekeeper the necessary food and clothing that the producer may require; BUT

IT VERY OFTEN OCCURS, however, that this small producer has already, been buying from a specific storekeeper ON CREDIT. In other words, the storekeeper has been SUPPLYING, during the winter, this small producer, and, when the bale of lint cotton is delivered to offset his, the purchaser's bill for supplies during the winter months, there is VERY LITTLE, if ANYTHING, coming to the small producer for his bale of lint cotton, after he has paid his bill to the storekeeper.

If the small producer is ABSOLUTELY INDEPENDENT, of a storekeeper and owes him nothing, THE VERY FIRST THING THAT THIS SMALL PRODUCER DOES, is, to take out his knife and CUT A HOLE in the bagging that has JUST BEEN PLACED UPON THE EDGES AND UPON THE HEAD OF THE BALE OF COTTON.

He will then pull from the bale a SAMPLE, which sample, will weigh, APPROXIMATELY, six ounces, and carry this sample around the village, and have ALL of the storekeepers and ALL of the representatives of Cotton Buyers, bid on the bale, and then sell it to the highest bidder.

Thus, you will see, that, in THIS instance, the FIRST HOLE is cut in the bagging and the FIRST MUTILATION takes place, by the PRODUCER of the cotton, and, approximately six ounces of the cotton is wasted.

The bale is weighed to the purchaser less this six ounces of cotton.

The six ounces are then handed to the purchaser, who immediately places these SPECIFIC six ounces, with many other six ounces that will have represented his PRIMARY PURCHASES of bales of cotton.

These six ounces GRADUALLY GROW, until they become MANY POUNDS and soon become A BALE OF COTTON, of approximately 500 pounds in weight, which bale then belongs to the purchaser, and for which, the producer has received NOTHING.

AS TO THE LARGE PLANTATION

Some of these plantations are, perhaps, owned by some one residing in a city, or may be owned by a country storekeeper and may be cultivated on a SHARE BASIS.

By a "SHARE BASIS," we desire to convey the meaning, that MANY land owners in the cotton district, as is the case, no doubt, in many farming districts, that produce OTHER products than cotton, rent their land to tenants on the basis of SHARING THE RESULT OF THE PRODUCTION of the land so rented.

Other large planters cultivate and handle, themselves, ALL the cotton produced on the plantation, operate their own gins, and, possibly, gin cotton for others, in their immediate vicinity.

They may sell their cotton to a Buyer direct, on their plantations, but always, of course, BY SAMPLE.

To produce this sample, they must CUT THE BAGGING on the bale of cotton, unless a sample be drawn from the bale, WHILE GINNING, and baling.

When the cotton is NOT sold at the point of origin, or, even when it IS sold locally to a country storekeeper, the local storekeeper usually re-sells, when he has accumulated a sufficient number of bales of cotton at the local point from individuals, or from his own plantation, to COTTON BUYERS' REPRESENTATIVES.

The Cotton Buyer, then, usually cuts this bale AGAIN, and DRAWS a SAMPLE of from six ounces to one pound, and ships this cotton to nearby concentrating points to a warehouse or compress, for SUBSEQUENT re-shipment abroad or to mills.

If the local point is CONVENIENTLY located, this cotton is shipped, if of a sufficient number of bales to justify the shipment, through to destination, but to be re-compressed "in transit" to the required density, re-loaded in cars, when it then resumes its journey to destination.

Most of the cotton bought at these interior country towns is shipped to compress points in the vicinity of the original purchase, for concentration and storage.

It is AGAIN, usually, sampled by the representative of the Buyer at this concentration point, or by the compress owner on BEHALF of the Buyer, and MAY also be inspected in the head, and FREQUENTLY, on the sides with augers.

THIS sampling and inspecting, causes ANOTHER MUTILATION of the bale of cotton, that, perhaps a week previously, was a fairly good package, PARTIALLY COVERED, but with bagging of LARGE MESHES, through which the cotton could be DISTINCTLY seen.

The bagging of the bale of cotton, by this time, at the concentrating points, has been cut from ONE, TWO and OFTEN THREE TIMES.

One head, AT LEAST, has been cut open, and the bale itself is quite a different MUTILATED PACKAGE from the ORIGINAL BALE, as ginned.

All of these samplings and handlings at concentrating points, each BORING, each INSPECTION and each SAMPLING, creates, for SOME ONE, an accumulation of a VERY GREAT VALUE.

As fast as these accumulations amount to a sufficient number of pounds to make a BALE OF COTTON, they are boxed, and partially clothed with bagging, and stored for the account of SOME ONE.

Each bale of these accumulations represents, approximately, 500 pounds of UNNECESSARY WASTE in the handling, the sampling and the mutilating of the original bale, and the value represented by THIS WASTE IS SOME ONE'S LOSS.

If all of the number of bales of this character of cotton, termed usually, "BALES OF SAMPLES" or "BALES OF ACCUMULATION," without considering the damaged pickings, which subject will be treated later, were DEFINITELY

and ACCURATELY enumerated and recorded, one would find, that the values represented by these SAMPLINGS, INSPECTIONS, PULLINGS, HAULINGS and CUTTINGS of these ORIGINAL BALES of cotton would amount to SO many MILLIONS OF DOLLARS, that the TOTAL amount, would be SIMPLY APPALLING.

One must remember that these samples, borings and loose are ALL TAKEN FROM THE ORIGINAL PACKAGE, and SOMEBODY, SOMEWHERE, is losing the number of pounds taken from these bales and represented by this millions of dollars of UNNECESSARY waste.

Ordinarily, no SINGLE producer loses VERY MUCH, but the TOTAL amount, when considered as a WHOLE, is VERY GREAT.

If the cotton is shipped to a large city market, to a COTTON COMMISSION MERCHANT, to be sold for the account of the producer or owner of this cotton, say, New Orleans, La., Memphis, Tenn., Savannah, Ga., Augusta, Ga., or Houston, Texas, etc., the result is usually as follows:

We will start from a country town, and follow the bale, step by step, and we will endeavor to describe the manner in which it is ordinarily handled, ALMOST EVERYWHERE, in ALMOST EVERY LARGE market, when cotton is shipped to a COTTON COMMISSION MERCHANT, to be sold for the account of a producer or owner.

If the point of origin, of this bale of cotton, is CONVENIENTLY near, one of these large markets, and when the owner or producer is ready to place this bale in the hands of a Cotton Commission Merchant for sale, he will convey it to a city compress or warehouse, where it is received, NOT FOR HIS, THE PRODUCER'S, ACCOUNT, but for the account of the COTTON COMMISSION MERCHANT that he, the producer, may designate, when he delivers the bale of cotton for storage.

The Cotton Commission Merchant may have made his arrangements to store this cotton with a public cotton warehouseman or compressor, or, he may conduct the warehouse himself, to which this bale is hauled.

When the bale is received at the warehouse, the deliverer is given a receipt for the bale of cotton, that states, in substance,

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It is a sample drawn from both ends of the bale, by cutting the baling at the points indicated by B and C. — ALL THE — INDICATES THE LOOSE COTTON THAT HAS BEEN TRIMMED FROM THE SAMPLE A, IN ITS MAKING, FOR THE PURPOSE OF PROCURING A GOOD SAMPLE, AND ALSO INDICATES THE FLAKES OF COTTON THAT WERE DISCARDED AS UNNECESSARY OR UNSUITABLE TO BE INCLUDED IN THE SAMPLE PROPER, AFTER BEING TAKEN FROM THE BALE. — — —

that, "He, the warehouseman or compressor, has received from the producer, whom we will call, "JOHN DOE," one, or a hundred bales of cotton, as the case may be, to be stored for the account of the Cotton Commission Merchant, whom we will designate as, "JOHN BROWN"."

The public warehouseman or compressor is not aware of any of the arrangements that may exist between John Doe, the producer and owner, and John Brown, the Cotton Commission Merchant.

When the cotton is deposited in the warehouse, at the request of the deliverer of the cotton, for the account of John Brown, AT THAT MOMENT, insofar as the WAREHOUSEMAN is concerned, John Doe has NO JURISDICTION WHATSOEVER, over this bale of cotton, and all orders covering this bale of cotton MUST EMANATE FROM JOHN BROWN, for whose account this cotton is placed on storage.

The NOW JOHN BROWN BALE, is, IF THE WAREHOUSE IS OF MODERN CONSTRUCTION, rolled from the wagon UNDER COVER.

If the warehouse is NOT A MODERN ONE, this bale MAY be received and rolled ON THE GROUND, WITHOUT COVER.

The bale may be received wet and damaged. IF SO, a warehouseman conducting his business PROPERLY, will so state on his receipt that is given John Doe.

IF NOT DAMAGED WHEN RECEIVED, and the bale is placed in THE OPEN, and subjected to weather conditions, this bale MAY, and probably WILL, damage, if the weather conditions are unfavorable, BEFORE the bale ultimately reaches cover.

The cotton in question is then sampled by cutting a hole on ONE or BOTH edges, from side to side between the bands. See Exhibit 1.

In some markets, say, the Memphis, Tennessee, market, the bale is sampled on both edges. Thus, we see, that, in addition to the holes already in the bale, we have two more holes; and, to the loss in weight already sustained by extracting cotton samples from the original bale, must be added the weight of another sample, representing the bale, which ranges in weight from six ounces to one pound.

The samples thus drawn are eventually, before delivery, wrapped in paper.

Each bale of cotton is then, usually, tagged with the name of John Brown, Cotton Commission Merchant, and the tags thus applied run serially.

When the cotton is tagged, and before the sample is wrapped, a coupon is detached from the tag that is applied to each bale that bears the same number as the tag that is placed on the bale, and the coupon is placed in each sample.

The samples are then wrapped and sent to the office of the Cotton Commission Merchant.

When these samples are delivered to John Brown, a list of the marks and tag numbers applied to each bale, is given to John Brown.

If a negotiable warehouse receipt is desired by John Brown from the warehouseman, such a receipt **MUST BE** issued and delivered to John Brown, which negotiable receipt **MUST BE RETURNED** properly endorsed before the cotton represented by the receipt can be delivered.

When John Doe is ready to sell his cotton, or, when John Brown is ready to sell the cotton **FOR** John Doe, the samples, previously mentioned, that were drawn from the bales, when the bales were originally received, are placed upon what is known as a "Cotton Table."

All of the Buyers in the city market, in which the Cotton Commission Merchant has his office, are invited to look at the samples.

The cotton is then purchased by Cotton Buyers on the samples that have been displayed upon the cotton table of John Brown.

When the sale is consummated, at an agreed upon price, for one bale or the entire table of cotton, an order is given to the warehouseman by John Brown to deliver to the Cotton Buyer the cotton described by tag numbers represented by the coupons, in each sample on this table, that has been sold.

The warehouseman knows nothing whatever of the terms of the purchase. He receives the order to deliver.

The cotton described by the tag numbers is then turned out from the piles where it has been stored.

It is the custom, in SOME CITIES, when the Buyer applies for the cotton, to have the cotton weighed to him, the Buyer, IMMEDIATELY BEFORE he, the Buyer, samples and inspects the cotton.

In other markets, the cotton is NOT weighed to the Buyer until AFTER it has been SAMPLED and INSPECTED and ACCEPTED, by the Buyer.

In the cities, where the cotton is weighed to the Buyer before it is sampled and inspected by the Buyer, you will note, that these ADDITIONAL MUTILATIONS of the bale by the Buyer, do NOT occur until John Brown has received payment for the entire weight of the bales that the shipper concludes to receive and he, the Buyer, does not REJECT.

If, in a lot of, say, 100 bales, even where the custom is prevalent, of the reception of cotton and sampling and boring of the cotton by the Buyer is done AFTER weighing, the shipper or purchaser rejects FOR CAUSE or with the PRIVILEGE SO TO DO, say, twenty-five of the one hundred bales of cotton tendered him, this cotton reverts back to John Brown, but has ALREADY undergone the mutilation in the sampling, and the acute inspection, very often, with augers thrust into the sides of the bale, besides the sampling on both edges, which makes the twenty-five bales, when returned to John Brown, weigh THAT MUCH LESS, insofar as the weight of the bale concerns John Brown, or, and John Doe, the original owner.

In the cities, where the custom is prevalent that the Buyer samples and inspects the cotton, that he will receive, which has been sold to him by John Brown, PRIOR TO THE WEIGHING, the cotton will have NATURALLY received much mutilation and will have suffered considerable loss to John Brown or John Doe.

The samples have been drawn before the bale is weighed and whatever loss that is sustained by the bale, due to this sampling and inspection by the purchaser, is a loss to John Brown or John Doe.

Besides the ACTUAL SAMPLES, that are acquired by the respective mutilators, there is an ABUNDANCE, of what is termed "LOOSE COTTON."

"LOOSE COTTON" or "COTTON LOOSE" are terms that are commonly used and indicate the flakes of cotton that are pulled off of samples or from the bale proper while making a PRESENTABLE sample.

This "LOOSE COTTON" falls on the bale, or on the ground or floor, near the point where the sample is drawn from each bale, and is gathered, and baled, and sold, for the account of some one.

In some cities, noticeably New Orleans, La., the revenues derived from the sale of accumulations are used, EXCLUSIVELY, for the payment for the services of "SUPERVISORS," and the men required to pick up the loose, who CONSCIENTIOUSLY and EFFECTUALLY, prevent an UNNECESSARY pulling of loose in connection with the creation of the samples, and in the inspection of cotton.

The samples, PROPER, however, drawn from the bale in the original sampling for John Brown, are baled as they accumulate, and are stored for the account of John Brown.

As a rule, these accumulations of loose cotton amount to, approximately, one-half pound, PER BALE.

This amount is in ADDITION to the weights of the samples proper.

This represents, in itself, quite a loss to original producers, AS A CLASS, if applied to the ENTIRE cotton crop of America; but, as the great majority of the cotton, at the PRESENT TIME, is NOT consigned to cities to John Browns for sale, this figure should not be applied TO, but a fractional part OF, America's production.

In some markets, immediately after the Cotton Buyer receives the cotton he has purchased from John Brown, it is sampled, by cutting ANOTHER HOLE in the bagging between the bands on each edge of the bale, and a LARGE sample is drawn, weighing, about one-half of a pound, from EACH SIDE OF THE BALE.

Besides this sampling, the Buyer bores the bale with a BARBED AUGER, making, usually, EIGHT insertions into the bale.

With EACH insertion of the barbed auger, he withdraws from this bale, say, one-eighth of a pound of cotton, which he

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EXHIBIT # 2



INSPECTION OF COTTON BY BORING THE BALE ON ITS FLAT--
 SIDE WITH A COTTON AUGER
 THE LOOSE COTTON SHOWN ON THE BALE AS INDICATED BY 'A'
 IS A SAMPLE, THAT HAS BEEN DRAWN FROM BOTH EDGES OF
 THE BALE, WITH WHICH THE COTTON DRAWN FROM THE GALE
 BY INSPECTION, AS SHOWN ON THE END OF THE AUGER 'B', IS
 TO BE COMPARED, SO AS TO DETECT MIXTURE IN GRADE, OR
 FALSE PACKING --- THE SMALL HOLE ON THE EDGE OF THE
 BALE 'C', IS THE HOLE CUT IN THE BAGGING BY THE PRODUC-
 ER, FROM WHICH HE HAS DRAWN A SAMPLE, ON WHICH THE PRI-
 MARY SALE, OF HIS BALE OF COTTON AT A COUNTRY TOWN, WAS
 CONSUMED. --- 'D, E, F, G' ARE FLAKES OF LOOSE COTTON THAT HAVE
 FALLEN FROM THE SAMPLES AND BORINGS. THIS LOOSE IS GATHERED
 AND BALED.

pulls off of the barbs of his auger after each insertion. A professional borer, CAN EASILY, IF HE WISHES, draw from a bale by each insertion of the auger, approximately ONE POUND OF COTTON. See Exhibit No. 2.

When this accumulation of "Loose Cotton" is picked up, it is usually placed in sacks, and conveyed to crates, and then re-baled for the account of SOME ONE.

In the markets where cotton is NOT bored and sampled, and the loose from the samples, that are drawn from both edges of the bale, are not taken from the bale until AFTER it is weighed to the purchaser, the approximately one pound per bale loss by sampling and one pound per bale loss by boring is borne by the purchaser. BUT

If this inspection with the auger, and the sampling on BOTH SIDES, is done BEFORE the cotton is weighed from John Brown to the Buyer, the additional loss of these, approximately, two pounds per bale, falls on JOHN BROWN or JOHN DOE.

In SOME cities, cotton is NOT BORED as a means of inspection, but, instead of boring, the cotton is inspected, by cutting open the bagging that covers the head of the bale, and pulling flakes of cotton out of the head, BY HAND. This method of inspection does NOT create as great a loss, as when the auger is inserted in the side of a bale for the purpose of inspecting it.

Regarding the loss of the two pounds of cotton as borne by the PURCHASER, that takes place when cotton is sampled on both edges and bored eight times on the flat sides of the bale, AFTER the cotton has been weighed to the Buyer and BEFORE he, the Buyer, samples and bores it.

This particular loss in weight to the Buyer is USUALLY overcome, and MADE GOOD, by the purchaser placing additional bagging, which is termed "PATCHING," on the cotton, when it is re-compressed, to overcome this loss of the two pounds in weight, TOGETHER WITH AN ADDITIONAL PATCHING for as much as the final tare to be deducted at destination will justify.

In SOME SECTIONS of the country, the PATCHING FEATURE, as regards the number of pounds, is GREATLY IN EVIDENCE.

In other sections of the country, the Cotton Exchanges RESTRICT the number of pounds of patching, to be applied by the cotton shipper, to FIVE POUNDS PER BALE.

If the cotton purchased by the Buyer is a purchase for a mill order, and NOT bought for speculation, this cotton usually goes forward IMMEDIATELY to the compress, for re-compression and patching.

If sufficient patching has been ordered and CAREFULLY applied, nearly all of these many mutilations are, IN A MEASURE, overcome.

While the original bagging, as now manufactured, is OFTEN of an inferior character, and is made with an extremely open mesh, still, the package STARTS, to destination, in a FAIRLY GOOD CONDITION and will, if five pounds of patching are PROPERLY applied, have very little of the cotton exposed, IF RE-COMPRESSED IN THE USUAL MANNER.

If, however, the bales are ordered re-compressed with the WEBB HIGH DENSITY ATTACHMENT, each flat of each bale, no matter how thoroughly the patching is done, will then be EXPOSED, from the TIME OF RE-COMPRESSING to FINAL DESTINATION, affording an opportunity for the SOILING, and the DAMAGING of the exposed flat of the bale that has been ordered PROPERLY PATCHED, but MUST BE exposed if THIS METHOD of re-compression of cotton, is required.

A bale of cotton, when re-compressed, IN THE USUAL, OR CUSTOMARY MANNER, when five pounds of patching are ordered and PROPERLY and CAREFULLY applied, immediately BEFORE re-compressing, will, immediately AFTER being re-compressed to an average density of 25 pounds, or MORE to the cubic foot, and tied with eight bands, have a total average surface, as measured on all six sides, of 6,547 square inches.

APPROXIMATELY, an average of 96% of the entire surface of such a bale will be covered, LESS the portion of the surface, that is always exposed owing to the WIDE OPEN MESH of the bagging now in general use, and APPROXIMATELY 4% WILL BE ENTIRELY EXPOSED and liable to damage, besides affording an opportunity for a spark, to start



SPECIMEN OF A "STANDARD" BALE OF COTTON VERY BADLY MUTILATED BEFORE RECOMPRESSION. THE DILAPIDATED CONDITION OF THIS BALE IS DUE TO THE MANY SAMPLINGS AND INSPECTIONS THAT HAVE TAKEN PLACE WHEN THE BALE HAS BEEN SOLD AND RE-SOLD MANY TIMES. APPROXIMATELY 2% OF BADLY MUTILATED COTTON OF THIS CHARACTER IS TENDERED FOR RECOMPRESSION EVERY COTTON SEASON.

a disastrous conflagration by direct contact with the lint cotton that is ENTIRELY EXPOSED.

A bale of cotton when re-compressed with the WEBB HIGH DENSITY ATTACHMENT, when five pounds of patching are ordered and PROPERLY and CAREFULLY applied immediately BEFORE re-compressing, will, immediately AFTER being re-compressed, to an average density of 32 POUNDS OR MORE to the cubic foot and tied with eight bands, have a total average surface, as measured on all of its six sides, of 5,405 square inches.

APPROXIMATELY, an average of 78% of such a bale will be covered, LESS the portion of the surface that is exposed, owing to the WIDE OPEN MESH of the bagging now in general use, and APPROXIMATELY 22% will be ENTIRELY exposed and liable to damage, besides affording an opportunity for a spark to start a disastrous conflagration by direct contact with the lint cotton that is ENTIRELY EXPOSED.

PATCHING bagging, that may be ordered by the shipper, is for sale by ALL compressors, at prices COMMENSURATE with the QUALITY and GRADE of patching the shipper may order.

The compressors will place on a bale of cotton, IF SO ORDERED, what is termed "a LOW grade or second-hand bagging," which is nothing more or less, than bagging that has been stripped from a bale of cotton at the spinning mills, and re-baled and shipped to the compressors.

This grade of bagging is sometimes ordered by the shipper, to SEEMINGLY cover the SAMPLE HOLES, and the MUTILATIONS that have taken place, during the MANY ramifications of the cotton bale in the warehouses and compresses, and which mutilations, from time to time, have been done by John Browns, and, or, the Cotton Buyers, until the bale, when finally ordered re-compressed, has often the appearance of a rag bag, of a VERY DISREPUTABLE CHARACTER. See Exhibit No. 3.

Now, of course, THIS character of second-hand bagging will NOT cover the holes and mutilations in the bagging of the bale, and will NOT cover the exposed portions of the bale, but IT WILL supply the weight at destination, that is subject to "TARE."

This character of bagging is the **LOWEST PRICED** and the **LOWEST GRADE** of bagging, that the compressor **CAN** furnish, to fill the order for patching given him, the compressor, by the shipper.

The next grade of bagging that is usually on the market for the covering, or the patching of cotton, is a much better grade of **"SECOND-HAND BAGGING."**

This character of bagging has usually been carefully assorted and handled at the bagging factories, where the mutilated parts in the bagging, that has been bought from the spinning mills, have been removed from the bagging, and a **"second-hand bagging,"** **WITHOUT HOLES** in it, is furnished and sold to the compressors, who, in turn, sell this bagging to the shipper and apply it on the shipper's order.

One must, however, remember that **MUCH** of this second-hand bagging, that is re-sold to the compressor, has been woven from, what is termed, **"RE-WOVEN BAGGING,"** which **"RE-WOVEN BAGGING"** is manufactured from the decorticated strands and fibres of **SECOND-HAND BAGGING, OVER AND OVER AGAIN.**

When the bagging is re-woven, a sufficient number of times, the fibres will **CEASE ENTIRELY** to exist, and the strength of the bagging, **SO RE-WOVEN,** unless it is mixed with some foreign substances to make it hold together, will be simply a **NOMINAL COVERING,** that is very easily torn.

The next character of bagging that the compressors are prepared to furnish, is a patching of **"NEW BAGGING,"** cut in appropriate sizes.

The **"NEW BAGGING"** patch is applied to each bale of cotton in accordance with the orders received from the shipper.

This bagging is an **EFFECTIVE** covering and produces a **VERY GOOD** package after re-compressing, and very little cotton is exposed, except what is exposed due to the wide open meshes, **PROVIDED** the bale is **NOT** pressed with the **WEBB HIGH DENSITY ATTACHMENT.**

The compressors are prepared to furnish, and **DO** furnish a very effective patch that is known as a **"MARKING PATCH."**

This patch is one, that is placed on a bale, when so ordered. of one-half of a closely woven second-hand sugar bag.

This patch is VERY STRONG, and absorbs the ink quickly, and is BY FAR, the BEST marking patch that has ever been produced.

This "half of a sugar bag," that weighs, approximately, one pound, placed on ONE SIDE of a badly mutilated bale of cotton while being re-compressed, and on which the mark is branded, and an ADDITIONAL patch of three pounds of NEW BAGGING, or a RE-WOVEN PATCH of three pounds, placed on the other edge of the bale of cotton, makes A VERY PRESENTABLE WELL COVERED package, if properly and carefully re-compressed with OTHER than the WEBB HIGH DENSITY ATTACHMENT.

DAMAGED COTTON.

The subject of damaged cotton, the various causes that create damage to cotton, from the time that it is picked, and is then in evidence as "SEED COTTON," and after it is ginned and baled, and is then known as "LINT COTTON," is one that is of the greatest importance to the entire cotton industry.

The financial loss in the original value of cotton, caused by the damage to cotton, which, by virtue of damage, shrinks to a NOMINAL VALUE, and becomes a WASTE, is a matter that concerns EVERY BRANCH of the cotton business, and, if even APPROXIMATELY calculated, would show a loss of millions of dollars yearly that is sustained, and is entirely attributable to the almost criminal negligence in the handling of cotton from its birth, as "SEED COTTON," until its consumption at the mill.

There are two PRINCIPAL causes responsible for the damage to cotton.

The first cause of damage, and one that is often NOT given the attention it deserves, but which cause of damage figures LARGELY in the general results, is the damage to cotton caused by EXPOSURE, in such a manner, that a discolorization of the fibre takes place, the cotton proper becomes SOILED or STAINED, by contact with dirt, brickdust, cottonseed meal or ANY foreign matter that may soil it.

The second, and by far the GREATEST contributory factor, is the WETTING of the cotton fibre.

A STORY OF
COTTON



A STANDARD BALE OF COTTON, 27 INCHES WIDE,
54 INCHES LONG, 48 INCHES IN HEIGHT AS MEASUR-
ED FROM THE FLOOR TO THE TOP EDGE OF THE
BALE. -- THIS PHOTOGRAPH SHOWS A DRY
BALE OF LINT COTTON, AS IT IS DELIVER-
ED TO THE PRODUCER IMMEDIATELY
AFTER GINNING.

DAMAGE TO COTTON.

**DUE TO THE BALES OF COTTON NOT BEING
PROPERLY COVERED.**

We will endeavor to analyze the damage to cotton due ENTIRELY to the lack of sufficient covering that is applied to a BALE of cotton.

The majority of cotton, that is ginned and baled, at present, is usually termed, an UNCOMPRESSED bale of cotton, and is generally considered as a bale of cotton, of STANDARD MEASUREMENT, as follows:

27 inches wide,

54 inches long,

and usually 48 inches in height (assuming that the bale is on its edge and measurement taken from the floor to the top of the bale.)

Such a bale of cotton, were there no bagging whatever on the bale, would represent, on its entire surface, on all of its six sides, an area of 10,692 square inches.

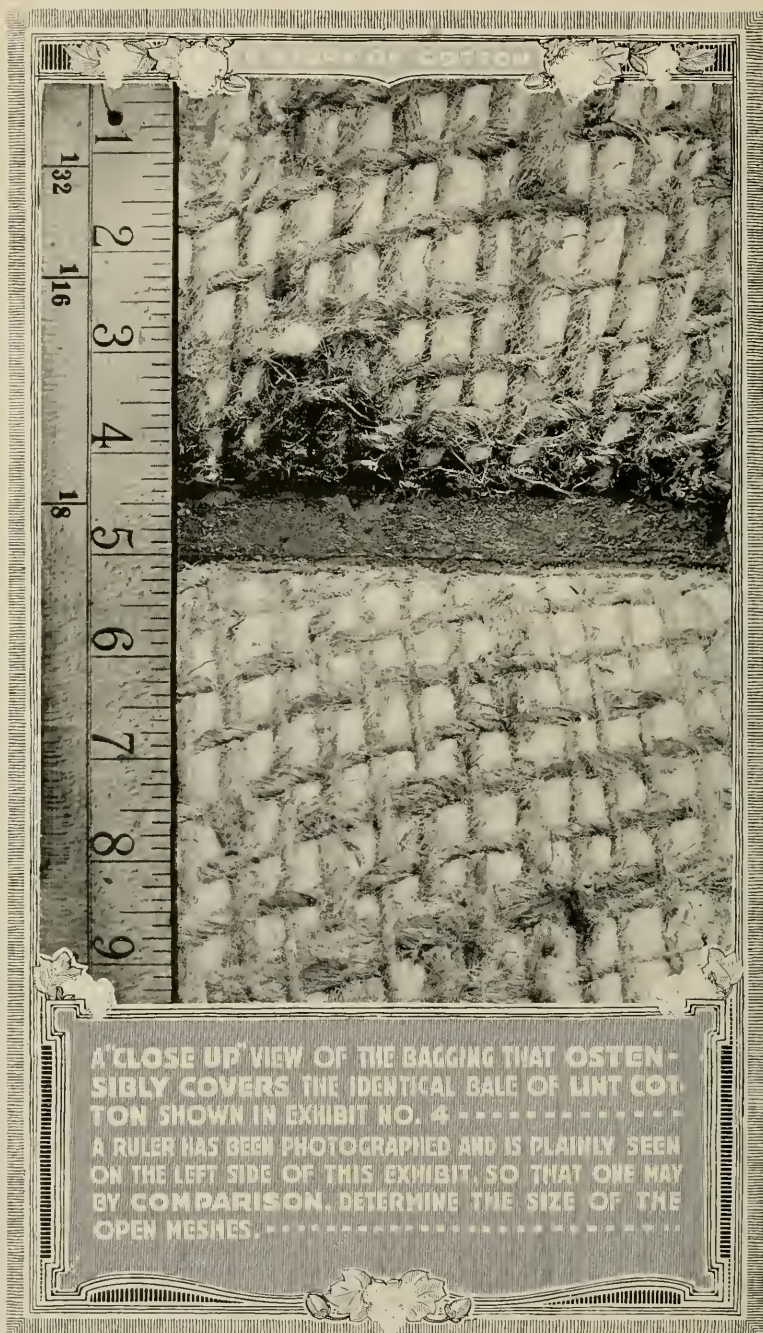
We will assume that these 10,692 square inches of ENTIRELY EXPOSED white cotton, are awaiting covering, and are before us in, what we will term, a NAKED STATE.

According to the PRESENT method, of OSTENSIBLY COVERING a bale of uncompressed cotton at the gin, there is applied to the top edge, the bottom edge, and both heads of the bale of cotton, a total of SIX YARDS OF JUTE BAGGING.

These six yards of bagging are sufficient, to not only OSTENSIBLY COVER the two edges PROPER, and the two heads PROPER of each bale, but extend over the edge on the FLAT side of the bale of cotton approximately twelve inches, and also extend approximately six inches on each flat of the bale over each edge at the head of the bale, as is shown in Exhibit marked No. 4.

The bale, as shown in this exhibit and as described, shows that a surface of 2,016 square inches of the bale was not covered in the ORIGINAL application of bagging.

This area of 2,016 square inches is the exposed surface, on



A 'CLOSE UP' VIEW OF THE BAGGING THAT OSTEN-
SIBLY COVERS THE IDENTICAL BALE OF LINT COT-
TON SHOWN IN EXHIBIT NO. 4 -----
A RULER HAS BEEN PHOTOGRAPHED AND IS PLAINLY SEEN
ON THE LEFT SIDE OF THIS EXHIBIT, SO THAT ONE MAY
BY COMPARISON, DETERMINE THE SIZE OF THE
OPEN MESHES.

the TWO flat sides of the bale, which measure 24 inches by 42 inches; this exposure is in evidence on BOTH flat sides of a bale.

This primary exposure of 2,016 square inches is always in evidence, unless, an additional yard of jute bagging, that is split in half, is applied to the bale to cover each surface above mentioned.

This additional application of bagging is usually termed a "SIDE CLOTH" or "SIDE STRIP."

As this "SIDE CLOTH" or "SIDE STRIP" is NOT at present in general use, we will discuss the bale as illustrated in Exhibit No. 4 with 2,016 square inches of surface PRIMARILY EXPOSED.

We now have a bale of cotton with an ENTIRE surface of 10,692 square inches.

There are 2,016 square inches of the entire surface, PRIMARILY and INTENTIONALLY exposed, and there are 8,676 square inches OSTENSIBLY COVERED.

Of this area of 8,676 square inches OSTENSIBLY COVERED, there is 58% or 5,032 square inches NOT ACTUALLY COVERED, due to the WIDE OPEN MESH of the bagging now universally used. See Exhibit No. 5.

The figure of 5,032 square inches, which represents the surface exposed, due to the wide open meshes, added to the figure of 2,016 square inches originally, INTENTIONALLY exposed, gives us a GRAND TOTAL surface that is UNCOVERED and EXPOSED of 7,048 square inches, of a TOTAL ORIGINAL SURFACE of 10,692 SQUARE INCHES.

Approximately every STANDARD BALE, of uncompressed cotton, of an average crop of 13,000,000 bales of cotton that is annually produced in America, is placed upon the market with approximately 66% of a surface ABSOLUTELY UNCOVERED, and liable to a POSSIBILITY and PROBABILITY of damage; in other words, APPROXIMATELY 66% OF THE SURFACE OF APPROXIMATELY EVERY STANDARD BALE THAT IS GINNED IN AMERICA IS UNCOVERED, and APPROXIMATELY ONLY 34% OF THE SURFACE OF THESE BALES IS ACTUALLY COVERED.

The portion of the bale that is ACTUALLY COVERED, is covered with a low grade of bagging that is manufactured, IN ACCORDANCE WITH THE DEMANDS OF THE TRADE.

It must be clearly understood that a manufacturer CAN, and WILL, manufacture the quality and grade of bagging that the trade demands.

The manufacturer, no doubt, would PREFER, if there were a market for such bagging, to manufacture a BETTER grade than the grade now furnished, and now demanded by the trade.

One can easily see from the above argument, as borne out by facts, that, insofar as the CORRECT and COMPLETE covering of a bale of cotton, as a means of PREVENTING DAMAGE that is caused by the exposure of the actual cotton, and preventing the contact of the cotton with foreign elements, that discolor the fibres, can be accomplished IMMEDIATELY, provided the consumer, and ALL INTERESTED PARTIES demand at once the ENTIRE COVERING of EVERY PORTION of a bale of cotton, with a character of bagging that is commensurate with the value of the commodity that is to be covered.

We anticipate that our argument AGAINST, the large open mesh of the bagging, that is at present used in the covering of cotton at the time of ginning, will be EMPHATICALLY contradicted by professionals who have spent many years in analyzing the causes of damage to cotton.

They will, no doubt, argue that the wide open meshes in the bagging, that is used in the covering of a cotton bale DO NOT CONTRIBUTE to the damage to cotton; BUT, TO THE CONTRARY, afford the air an opportunity to reach the fibres quickly, and dry out the moisture that has reached the fibres, and, thus, prevent a deterioration of the parts, so exposed by the open mesh, from damage by water.

This argument, if advanced, IS ABSOLUTELY CORRECT, if the cotton interests are to continue to allow cotton to be handled in the manner that it has been handled in past years, or, in fact, ever since cotton has been grown.

In further SUPPORT of the argument that professionals may use concerning this matter, we desire to state that, if the

wetting or exposure of cotton in bales is to CONTINUE as heretofore, we would advocate, not only an open mesh bagging, as is at PRESENT used, but would go FURTHER, and advocate a bagging with a mesh as large, if not LARGER, than the mesh of a tennis net, or twice as large as such a mesh; FOR

If the bagging, that is applied to a bale of cotton is intended to ONLY hold the flakes of cotton in such a manner as to prevent these flakes from falling from the bale, it is only NECESSARY, that the bale should be covered with a net with a mesh, say, three inches in diameter; and, when the bale is rained on, and, immediately thereafter, exposed to the wind and sun, the moisture will VERY SOON EVAPORATE, and the fibre will continue to retain its original strength.

We are assuming, however, that, PERHAPS, a change is anticipated and that COTTON, one of the most valuable commodities that is grown, will be accorded the same consideration as other products of infinitely less value than cotton; and THAT—

THE PRODUCER, THE GINNER, THE MERCHANT, THE WAREHOUSEMAN, THE STEAMSHIPS, THE CONSUMER and THE RAILROADS are to be compelled to SHELTER cotton, and keep cotton DRY, from the time it is picked from the boll as “SEED COTTON” until it is FINALLY consumed at the mill, and that the millions and millions of dollars of waste, at present obtaining, due to CRIMINAL NEGLECT, will be forever stopped.

If it is NOT the intention of the cotton interests to FORCE all handlers of cotton to keep this product ABSOLUTELY DRY in every single movement, from producer to consumer, it is absolutely USELESS to ATTEMPT a reformation in this respect; AS

IF ANY ONE OF THE HANDLERS above mentioned, fail to shelter and keep dry this commodity, cotton will damage through any one of the individual neglects, and will contract, the DISEASE OF DAMAGE, and DEFEAT the ORIGINAL intention.

DAMAGE TO COTTON.

DUE TO THE WETTING OF COTTON.

Immediately after cotton has been picked, and is in evidence as "SEED COTTON," its liability to damage, from the effect of water, immediately COMMENCES.

If the "SEED COTTON" is allowed to remain in the field IN PILES, as is very often the case, and is NOT protected from the rain, and, if these piles in the fields are NOT elevated from the ground by having been placed on a platform, the cotton fibre, that is exposed on the top of the pile of cotton, will NOT usually become damaged, but the cotton on the bottom of the pile will quickly damage; FOR—

As soon as the rain STARTS FALLING on this pile of "SEED COTTON," the fibres on the top and sides of the pile will immediately cling together, and seal the air between the fibres, and the water will be deflected; and the pile of "SEED COTTON" will shed all, or nearly all, of the water, and the moisture on the TOP and SIDES of the pile, will dry out in a very short time after the rain ceases.

Quite a good deal of the moisture, that fell upon the top of the pile and ran down its sides, finds its way UNDER these piles of cotton and is rapidly absorbed, by CAPILLARY ATTRACTION, INTO and between the fibres of the cotton that are situated UNDER the piles, and being so situated, prevent the naturally rapid evaporation of moisture, that takes place on the TOP and the SIDES of the pile of "SEED COTTON."

If the "SEED COTTON," that has been gathered in the field is immediately transferred from the picker's sack or bag to a cotton gin, in a dry state, the finished product, that is represented by a BALE OF LINT COTTON will be a perfectly DRY BALE, when delivered to the producer at the gin.

Large planters usually erect, in many places on their plantations, small cotton houses for the reception of "SEED COTTON" direct from the field, when it is gathered, in EXCESS of the ability of the ginner to gin as fast as the cotton is picked.

If "SEED COTTON" IS ginned, when the lint on the "SEED COTTON" is DAMP, but not DAMP ENOUGH, to damage

after ginning and packing in a bale, a great degree of moisture is partially sealed WITHIN this bale.

The loss of weight, due to the GRADUAL evaporation of moisture that is confined in a bale of cotton of this character, that is ginned, and baled, when the lint is even SLIGHTLY damp, is ENORMOUS.

As this confined dampness or moisture is not visible, it is not possible to deduct for this moisture in weighing, when the bale of cotton is sold from one cotton dealer to the other.

If the "SEED COTTON" is ginned with a very great amount of moisture in it, the bale of LINT COTTON resulting from the ginning of this "SEED COTTON" WILL DAMAGE INTERNALLY.

The DEGREE of damage is governed ENTIRELY by the amount of moisture originally partially sealed in baling, that remains in the INTERIOR of the bale.

A very great deal of damage, and MUCH loss in weight ensues EVERY YEAR, through the lack of care taken of "SEED COTTON," before it is passed to the ginner.

The amount involved of loss in weight, or loss by damage, due to the above causes, if it were possible to be accurately computed and applied to any SINGLE YEAR'S production of American cotton, which is entirely due to the PRIMARY NEGLECT in the handling of "SEED COTTON," by the original producer, would be recorded in "MILLIONS OF DOLLARS."

When the producer delivers "SEED COTTON" to the gin, the "SEED COTTON," so delivered, is hauled to the gin in an open wagon, that usually has a holding capacity of, from 1,600 to 1,800 pounds of "SEED COTTON."

The wagon load of "SEED COTTON" is delivered to the ginner under the cover, of an OPEN SHED.

The wagon loaded with the "SEED COTTON" is driven on to a PLATFORM SCALE, and is there weighed, IN BULK; and the total weight of the wagon, and its contents, recorded.

While still on the scales, an iron suction pipe, that passes through the roof of the shed, is placed immediately over, and in contact WITH the load of "SEED COTTON."

By means of suction, the "SEED COTTON" passes, very rapidly, up the suction pipe, and is carried to the upper por-

A STORY OF COTTON



DELIVERING "SEED COTTON" DIRECT FROM COTTON FIELDS
TO A COTTON GIN, IMMEDIATELY AFTER BEING PICKED. . . .
THERE IS FROM 1600 TO 1800 POUNDS OF SEED
COTTON IN EACH WAGON. . . EACH WAGON LOAD OF
SEED COTTON WILL WHEN GINNED PRODUCE ONE
STANDARD BALE OF LINT COTTON, WEIGHING
APPROXIMATELY FIVE HUNDRED POUNDS.

tion of the gin house, where the process of the delivering AUTOMATICALLY of the "SEED COTTON," to the GIN PROPER takes place.

The saws of the gin separate the majority of the lint from the seed.

The LINT is automatically carried, in one direction, to the BALING PRESS, and the SEED is automatically diverted, in another direction, to the SEED HOUSE.

After the wagon has been emptied of the "SEED COTTON," the wagon is then weighed, and the weight of the wagon deducted from the TOTAL weight originally recorded, TOGETHER with an agreed upon amount of tare, for foreign substances or moisture that may be mixed with the "SEED COTTON" that the ginner has received from the producer.

The seed, that has been separated from the lint by ginning is usually bought from the producer by the ginner at the prevailing market price.

Should the producer object to the price, the ginner will deliver, from his seed house to the producer, the number of pounds of seed that he, the producer, is entitled to in accordance with the original total weight, LESS the "TARE" originally agreed upon and LESS the weight of the bale of LINT COTTON, that is in evidence, after the load of "SEED COTTON" has been ginned.

As the result of the ginning of the "SEED COTTON," of the weight of, from 1,600 to 1,800 pounds, a BALE of LINT COTTON, of approximately 500 pounds, is in evidence, of a STANDARD MEASUREMENT of 27 inches wide, 54 inches long and 48 inches in height.

This bale of approximately 500 pounds, thus produced, is approximately 34% OSTENSIBLY COVERED and 66% NAKED or WITHOUT COVER.

Such a bale, however, presents a FAIR APPEARANCE, immediately after ginning and baling.

What constitutes delivery by the ginner to the producer, is the rolling of the bale from the gin building on an open, elevated platform.

If the producer's wagon IS ready to receive it, the bale is delivered OVER the platform directly ON TO the wagon of the producer.

If the producer's wagon is NOT ready to receive the bale, it is simply dumped off of the platform, on to the earth ALONGSIDE of the platform of the gin, and usually allowed to remain in the position, on the earth, that the bale accommodated itself to when thrown from the platform.

If the earth is DRY, at the time of the dumping of the bale, very little harm is done to the bale in this, INITIAL PERFORMANCE.

If the earth is WET, the bale receives its FIRST CONTAMINATION, by contact with mud and water.

After the producer has loaded the bale of LINT COTTON on his wagon, the bale then STARTS on ITS LONG and PERILOUS journey to the consumer in America or to the spinners abroad.

A bale of dry cotton, delivered at the gin platform and rolled into the producer's wagon, is, either hauled to the producer's home and dumped on the ground, usually, WITHOUT PROTECTION from the rain, or, it is hauled to a neighboring village, very often IN THE RAIN, to be sold in the manner previously described, or, is hauled to a warehouse or an open railroad platform and there delivered for the account of the producer; BUT—

In any event, if it IS raining, this bale of cotton is absorbing moisture EVERY MOMENT.

Each moment, its liability to damage is increasing, and, after the PRIMARY MANIFESTATION of damage, which usually takes place and is in evidence under the bands next to each end of the bale where the bagging is tucked under the band, which tucking forms three layers—two of bagging, and one of the band proper—and the bagging is so tightly pressed against the fibre proper of the bale that the rapid evaporation of moisture is prevented.

The theory that is usually accepted, "As the wish is the father of the thought," is, that, the turning, and RE-turning a bale of cotton, and heading and RE-heading a bale of cotton, where the rain is allowed free access to the bale, WILL PREVENT DAMAGE by water to a bale of cotton.

This THEORY is ABSOLUTELY ERRONEOUS and NOT founded upon a FACT, which FACT is demonstrated EVERY

YEAR, at ALL points where cotton is EXPOSED to the elements, even when a MOST CONSCIENTIOUS EFFORT is made to AVOID damage, in the manner above described.

IT IS IMPOSSIBLE, to prevent a bale of cotton from becoming damaged by water, if the bale is allowed to remain in the open and subjected to the elements, for any GREAT LENGTH OF TIME.

As substantiating this statement, we will endeavor to analyze DAMAGE BY WATER.

The arguments and statements that follow can very easily be substantiated or refuted by any one desiring so to do, as there are thirteen million opportunities each year, to PROVE or DISPROVE the statements, that, in the following analysis, we will endeavor to make comprehensive.

Any statements to the contrary, WITHOUT THE PROOF, can, in no way, influence, if the opportunities for proof are not taken advantage of, as the opportunities are abundant for the bearing out of all of our arguments, or CONTRADICTING any or all of them.

ANALYSIS OF DAMAGE TO COTTON BY WATER.

A BALE OF LINT COTTON, is composed of billions of fibres of COTTON LINT.

Each fibre of cotton is a cellulous tube.

In the beginning of a cotton season, the cotton, after it is ginned and baled, has, apparently, within the bale, and either IN, or around the tubes of each fibre, some NATURAL VEGETABLE OIL that evaporates as the season progresses.

Whether this oil, or this SEEMING vegetable oil, is due to a slight immaturity of the fibre, caused by the picking of cotton, a little prematurely, or, whether, IN FACT, such an oil exists is a matter for professional chemists to determine; BUT

What are known as "the first bales of cotton," that are marketed, have a peculiar odor in evidence, when one samples the bale, that identifies a SOMETHING, associated with this fibre that is capable of emitting a decided odor.

This odor usually disappears, as the season advances, and, in a very short time, is not noticeable.

If there IS a vegetable oil, it is not visible, and it is not susceptible to identification, by the means of touch.

The subject of, an oil influence as a deflector of water, is one, that WE are not able to INTELLIGENTLY discuss, but, is only mentioned, as the fact is often used, in argument, that this SO-CALLED oil or oily condition, is ONE of the factors that naturally assists in deflecting the water from the bale, and prevents its absorption when a bale of cotton is exposed to water.

Our lack of knowledge, on this particular subject, necessitates our analyzing the subject of "DAMAGE BY WATER," with this feature ENTIRELY set aside, and the analysis as given, will consider the bale with this feature, ELIMINATED.

When water comes in contact, FOR THE FIRST TIME, with the surface of a bale of dry cotton, that is 34% covered with jute bagging and 66% exposed, the water that comes in contact with the bagging is readily deflected by the strands of the bagging and also by the cotton proper.

The water, that wets the bagging for the FIRST TIME, is deflected, on the same basis as any NEWLY WOVEN bagging of the same character, when new and dry, will deflect, for a time, and until its pores are open, and the strands have been once THOROUGHLY wet.

After one or two showers, or, if in constant contact with water, the strands of bagging expand, and, after each wetting, become more easily and more QUICKLY wet throughout; THEREFORE:

The 34% of bagging covering of a bale, after having been wet SEVERAL TIMES, becomes an ABSORBER, on the same basis as does a dry sponge, after being wet several times. The water passes very rapidly INTO the strands, and saturates the cotton under EACH STRAND, where the moisture remains a VERY GREAT LENGTH OF TIME.

Naturally, this moisture is not as susceptible to drying out, on the under side of the strands next to the cotton fibre, where the air is not free to circulate, as is the case with the moisture on the top of the strand exposed to air always and, at times, to sunshine.

Such being the case, and the moisture of the bagging being retained on the under side, and pressing against the cotton fibre, the cotton fibre IMMEDIATELY begins to operate, on lines of natural philosophy, and each of the million strands of cotton fibre, that are pressing against the moist bagging, starts, by CAPILLARY ATTRACTION, to suck this moisture into each of its little tubes; and, by this means, and through this contagion, the cotton fibre proper becomes wetter and wetter, and each fibre, after its first wetting, acts independently in taking the moisture further and further into the bale.

The amount of moisture sucked INTO a bale of cotton by capillary attraction, is, in proportion to the water supply that is furnished the outside fibres of cotton that are immediately contiguous to or in contact with this moisture.

As to the water that comes in contact with the exposed 66% of the cotton fibre proper.

When the bale of cotton was boxed and ginned and was packed to a density of, say, twelve and one-half pounds to the cubic foot, the packing of this cotton in the gin box was merely the placing of the fibres of this cotton close together, and expelling SOME of the air, so as to make the original package one of a character that could be readily handled.

The subsequent compressing and re-compressing of cotton is simply the exertion of more pressure on this same bale of cotton and expelling more air.

In gin compressing, by any process whatever, either at the round bale gin compress, or the square bale gin compress, it is simply a method of rolling or folding the fibres closer and closer together, in such a manner that less air is boxed and sealed when the bale is ready for marketing.

If a bale is gin compressed, it will not require re-compression to expel the air, that is in evidence in the present standard bale of cotton, for the purpose of reducing the size of the bale so the bale will occupy less room, in railroad cars and steamships.

In the original baling of the bale of cotton to the density, say, of twelve and one-half pounds to the cubic foot, there is, necessarily, very much air left between the fibres of a so loosely packed bale of cotton, although the air is practically

sealed by the fibres having been laid very closely together in the bale even when pressed to this density.

If such were NOT the case, and there was NO air, each individual fibre would adjust itself to its proper position, and if the air was ALL, or NEARLY ALL, expelled, the bale, instead of being a STANDARD BALE or 27 inches x 54 inches x 48 inches, would become a GIN COMPRESSED BALE OF COTTON.

The air, that is sealed, in the present standard gin-pressed bale, acts as a water resister or deflector, and it is the air that is so sealed in a loosely packed bale of cotton that prevents the water from occupying the space between the fibres, as rapidly as does a compressed bale where much more air has been expelled.

All bales of cotton that are damaged by water under usual conditions should show evidence of damage, as a rule, in the following order:

FIRST: The bale becomes damaged under the laps at the ends of the bands, where the air is not permitted to quickly enter, and evaporate the moisture.

SECOND: Damage soon begins to manifest itself, on the twenty-four points on each edge or corner of the bale where the bands surround the bale and sink into these corners, which points are where the greatest density exists, and where, immediately under each band, the air has been expelled and the capillary attraction of the fibre is exercised more rapidly and acts uninterruptedly.

After a bale of cotton has absorbed quite a good deal of water, and the moisture has penetrated into the bale some distance, and the bale is still exposed to the elements, a solid cake, similar to a pie crust, forms on the outer surface of the bale at the damaged points, and prevents even the partial entrance of air, to assist in the evaporation of the moisture in the bale at the damaged points.

While this cake or crust, on the exterior of the bale dissolves when being rained upon, and absorbs more moisture, immediately upon the sun shining, this outer cake on the surface again becomes hard, and prevents evaporation, and all of the moisture that penetrated in and about this cake during the

rain, is sealed at the top and the bale continues to absorb and absorb, inwardly, by capillary attraction.

After the bale is caked on the surface and the moisture is confined and heated, what is known, ordinarily, as mildew begins to manifest itself.

The points in the bale below the caked surface, that are affected and have become damaged in this manner, begin to heat very much, all the fibres begin to rot, and the bale will still keep heating at these points more and more, until the absolute destruction of the fibre has taken place, when the portion, so diseased, will then quickly cool.

The portion of the bale that has suffered this deterioration, will, in ALL such cases, be so inferior in grade that, when removed, the diseased portion will not be considered even as desirable as "PAPER STOCK."

It is usual, and it is a well known fact, that, in an AVERAGE COTTON SEASON, thousands upon thousands of bales are allowed to deteriorate in the manner above described, and, eventually, when this damaged cotton is removed, the loss in cotton sustained by SOME ONE, usually the producer, amounts to MILLIONS upon MILLIONS and MILLIONS of dollars.

In fact, were the amount of money, that is lost and wasted in any single cotton season, be assembled into one large figure, that is due solely to the deterioration of cotton in bales, by allowing these bales to be exposed to contact with water, the assembled figure, would be large enough to pay OUTRIGHT, for the construction of sufficient LARGE and SMALL warehouses to properly house, and prevent the damage caused through the exposure of cotton to the elements.

Many public warehousemen, who contract to store and handle cotton, do, during a congested season, place the cotton in an open field, or in a street near their warehouses, and allow, in an almost criminal manner, the cotton to damage for which, they, the warehousemen, are paid storage and have agreed to protect.

Railroads should be compelled by law to receive cotton on dry, covered platforms.

This particular phase could be readily remedied by the institution of the proper laws governing the subject.

The act of removing the damaged cotton from a bale and allowing the sound cotton to remain undisturbed, is termed the "RE-CONDITIONING OF COTTON," or, in other words, the re-creating of the cotton, by extracting the damaged portion from the bale and reproducing a bale of sound cotton.

This RE-CONDITIONING is conducted in various ways.

At some points and under some conditions, the cotton is re-conditioned, by removing the bands from the bales, and using a cotton hook or a wire brush, if the bale is slightly damaged.

The damaged portion is removed from the bale by pulling out the diseased cotton and allowing the sound fibre to remain.

Even when conducted, as it usually is, on an ABSOLUTELY HONEST basis, it is almost impossible to separate the DAMAGED FIBRE from the sound fibre, without pulling from the bale much sound cotton.

Another means of removal, and one that is universally adopted where the amount of damage is very extensive, is the sending of the bale to a cotton pickery for re-conditioning.

Many cotton pickeries exist and prosper MAINLY by virtue of the damage to cotton, and are equipped for removing damaged cotton from the bales of cotton.

The bales picked at the pickery, are stripped of both their bagging and bands, and employees, usually women, surround the bales, and, by hand, pick the damaged fibre from the bales.

The bagging, very often, will have ROTTED from exposure, and, in that case, the pickery man applies new bagging and re-marks the bale.

The pickery man usually buys the pickings that he removes from the bale, gauging his price in accordance with the deterioration of the fibre, by damage.

If the pickings, taken from the bales, show that a SLIGHT deterioration has taken place, the pickery man gives the producer, or the merchant, a certain price.

The pickery man has means of drying out the SLIGHTLY damaged fibre, and running it through a machine, and re-baling it, the re-baled cotton is placed on the market for sale on its merits.

If the damaged cotton has deteriorated somewhat more, and the fibre is not **ALTOGETHER** destroyed, he, the pickery man, will credit the producer, or merchant, with a less price than he does if the damaged cotton shows the fibre is but slightly deteriorated.

If the part of damaged cotton removed is what is termed, "**PAPER STOCK**," the unfortunate owner of the bale will receive a nominal sum for the paper stock so removed; **AND**

Thus, **SEASON** after **SEASON**, and **YEAR** after **YEAR**, starting with the producer, immediately after his bale has been ginned, and all the way to the consumer, this sadly neglected bale of cotton is always in evidence as a witness of its own destruction, and a silent example of **MANY MILLIONS OF DOLLARS** lost, **EVERY YEAR**, through the **CRIMINAL NEGLECT**, in the handling of a cotton bale.

A very great many arguments will be presented, in which it will be **EMPHATICALLY STATED**, that it is an **IMPOSSIBILITY**, to correct the evil of the wetting of the cotton bale or the cotton fibre, owing to the rapidity of the movement of the **CROP**, but none will contradict the statement that this great loss by damage obtains.

If these arguments are accepted, and if **IT IS AN ADMITTED IMPOSSIBILITY**, that cotton can **NOT** be kept dry, the same as other commodities, then we must **BURY THE THOUGHT FOREVER**, of preventing the damage to cotton by water, and finally consider that the "damage by water feature" must remain as an **INCURABLE DISEASE**, for all time to come.

WAREHOUSING OF COTTON.

The inadequate storage facilities for the proper sheltering and caring for, and avoiding damage to, cotton, in the Southland, and the lack of facilities for the storage of cotton at convenient localities contiguous to cotton mills in New England and the Carolinas, is so well known, that the simple assertion, that such is a **FACT**, will be generally accepted.

It is essential that, in the construction of warehouses, due consideration be given to **ALL** points concerning the preservation of the cotton fibre.

Whether the warehouse to be constructed, is one with a maximum holding capacity of one thousand bales, or, whether the warehouse is expected to contain a maximum holding capacity of one million bales of cotton, the same degree of thought and attention, should be given to its construction.

All plans and all specifications for the construction of a cotton warehouse, either large or small, should be submitted to the Fire Insurance Underwriters before they are finally adopted.

This is ABSOLUTELY necessary, as, the enormous amount of money paid to Insurance Companies in premiums, each year, is, in itself, one of the most extensive causes of complaint by the owner of cotton. WHEREAS,

It is NOT the desire of the Fire Insurance Underwriters to collect LARGE premiums, due to GREAT hazards, and to the GREAT EXPOSURE of cotton to fire, as the Insurance Fraternity, collectively and individually, would infinitely rather collect smaller premiums on the policy that issues for cotton that is stored in sprinklered warehouses and properly cared for.

The Fire Insurance Associations of America, and the Fire Insurance Associations of Europe are prepared, free of all cost to the prospective builder of a warehouse, to furnish, at any and all times, the advice of professional men that have made a LIFELONG STUDY of the subject of fire protection, to check specifications for cotton warehouses and advise, in such a manner, that the FIRE HAZARDS will be reduced to a minimum, when a finished warehouse is produced, and the rates for insurance will be of a MINIMUM character, and the assured will be perfectly satisfied.

It often occurs that cotton warehouses are constructed WITHOUT consulting the Fire Underwriters' Engineers, with the result, that the rate for insurance, when applied to the contents of a warehouse so constructed, is OBJECTED to.

The warehouseman becomes INDIGNANT, as to the rates the Fire Insurance Underwriters make applicable to his warehouse, with the result, that the builder has but TWO alternatives under these conditions.

He will either have to pay the rates that the Insurance Fraternity publishes as applying to his warehouse, that was built without consultation with the Underwriters; OR

He will have to RECONSTRUCT his warehouse, by ADDING TO or TAKING FROM, his original construction, often, at an ENORMOUS expense.

If one will realize the FACT, that Fire Insurance Underwriters must be considered, and are partners of the assured; if the cotton people, at large, would always CONSULT WITH THE FIRE UNDERWRITERS on a PARTNERSHIP BASIS, much of the friction between the insurance companies and the assured would be eliminated.

In compiling the specifications for a cotton warehouse, it is exceedingly essential that the warehouse should be SO divided by fire walls that the maximum values, subject to one fire, should be limited, and GREAT losses due to conflagration, be MATERIALLY reduced.

If cotton is to be piled, it is absolutely essential, so as to avoid damage to the cotton fibre, that may press against the floor, if the cotton is to be held in the pile a GREAT LENGTH OF TIME, that the lower tier of the cotton be placed at least three inches from contact with the floor, as the natural dampness, given off by the earth through the pores of the floor will be sucked into the bales by capillary attraction, and the lower flats of the bales, that are in CONTACT with the floor will BECOME DAMAGED.

It is ESSENTIAL, that a sufficient amount of ventilation can, when necessary, be readily admitted into each compartment in which cotton IS stored, for the purpose of evaporating atmospheric dampness that ordinarily permeates any COMPLETELY enclosed compartment.

If ventilation is not provided, when a damp atmospheric condition prevails within the compartment, then, we AGAIN have the absorption of moisture from the atmosphere by the bale of cotton, which moisture, when the cotton bale is weighed from Buyer to Seller, not being visible or susceptible to touch, will, when eventually evaporated from the bale by contact with dry atmospheric conditions, cause a loss in weight ranging from three pounds to eight pounds per bale.

Properly constructed warehouses, operated by competent men of UNQUESTIONABLE INTEGRITY, are ABSOLUTELY ESSENTIAL for the conduct of the cotton trade of America, as the negotiable warehouse receipts, issued by warehousemen, are the documents, by means of which the cotton crop is financed by the producer, the merchant and the manufacturer.

The "fountain source" of the hundreds of millions of dollars required for the movement of the cotton emanates, primarily, at the PRESENT time, from the United States Reserve Bank.

The laws, regarding the issuance of a negotiable warehouse receipt, as they refer to public warehouses and public warehousemen, have been given MORE THAN ORDINARY ATTENTION, by the United States Department of Agriculture, who have recently published an almost PERFECT method for the handling of cotton in warehouses.

They have educated, and are daily educating, professionals in the grading and weighing of cotton, and are inviting all cotton warehousemen to become BONDED COTTON WAREHOUSEMEN, so as to establish, beyond the shadow of a doubt, the RESPONSIBILITY of any warehouseman that makes application to and is accepted by the Department of Agriculture.

When the Department of Agriculture bonds a warehouse, the United States stands as SPONSOR for the honesty of the employees of a warehouse so bonded.

Most of the bankers are, at present, inclining towards the United States Bonded Warehouse Method of the issuance of Negotiable Warehouse Receipts.

In this, the bankers are ABSOLUTELY CORRECT, as, at present, the great majority of the negotiable warehouse receipts DO NOT SHOW any weight of the bale or bales, or ANY GRADE of the cotton contained in these bales on the face of the negotiable warehouse receipts that issue.

The banks must rely ENTIRELY upon the integrity of the cotton man who hypothecates the negotiable warehouse receipt as collateral for the loan desired.

This naturally makes the negotiation of a loan on cotton between the cotton men, the borrowers, and the bankers, a matter of PERSONAL EQUATION.

Under present methods, the banker, on his part, may FAIL TO LEND sufficient money to the borrower, not knowing the value of the cotton represented by the warehouse receipts that are presented to him as collateral for a loan.

On the other hand, the banker may err in lending TOO MUCH, to some one in whom he may have great confidence, simply on the statement of the borrower, that the particular grades of cotton, as represented by the negotiable warehouse receipts, are of a SUPERIOR grade or staple and entitled to a greater loan than would be made on the average grade of middling cotton.

When warehouses are operated as, United States Bonded Warehouses, the weight and, at least, the approximate grade of every bale of cotton deposited in the warehouses, appear on the face of the receipt that is issued by the United States Bonded Warehouse.

Thus, ALL of the RISK, that is taken by the banker, is immediately removed.

The borrower is enabled to receive a NEARLY full value on his cotton.

We are not considering the values relative to LONG STAPLE, which values, the banker may easily substantiate, at any time. For, when he, the banker, holds the negotiable warehouse receipt of the borrower, properly endorsed, he naturally becomes the owner of the cotton. He can, at any time, upon presentation of the negotiable warehouse receipts that are in his possession, and paying the warehouseman for his labor of sampling, DEMAND from the warehouseman a sample of the cotton represented by the negotiable warehouse receipts, and thus ESTABLISH the values, relative to staple.

The fact of the cotton being graded at the warehouse, in no way, prevents the cotton merchant from handling the commodity according to his, the cotton merchant's judgment of the grades.

The matter of weighing and grading at the warehouse is simply for the purpose of safeguarding the banking interests of the country.

The subject of a CHAIN OF WAREHOUSES, of the most modern character, and with the lowest possible rates of insur-

ance obtainable, is, at present, under consideration throughout the large financial centers in America.

It is expected that the owners of cotton abroad will soon become MATERIALLY and INTIMATELY associated with the plan of a CHAIN OF WAREHOUSES.

This CHAIN OF WAREHOUSES, at present, in contemplation, and that is being discussed and apparently, FAST MATERIALIZING, is to be conducted under the auspices of the United States Government as represented by the Department of Agriculture, and on lines with the absolutely "SAFE AND SOUND" warehousing of cotton.

The warehouses of the "Chain of Warehouses," we understand, are expected to be located at various points throughout the North and South where it is necessary and expedient to concentrate cotton, so that it may be FINANCED through LARGE financial centers.

It is not in contemplation, as the public are given to understand, to erect these warehouses in OPPOSITION to ANY OR ALL of the small warehouses in country towns and at all cotton concentrating points.

The "CHAIN OF WAREHOUSES" will not, necessarily, injure the small warehouses; PROVIDED,

That these small warehouses are conducted on the same lines as those of the contemplated chain, as it is the intention to conduct each of the warehouses independently, but each individually, a link in the chain.

Often, it is the desire of the original producer, to hold much of the cotton produced in America for better prices.

In the majority of the instances, the producer or the owner, must hypothecate a negotiable warehouse receipt as a collateral for loan for the purpose of conducting his business.

The producer, the merchant or spinner MUST HAVE SOME PUBLIC WAREHOUSE in which he can store his cotton.

The negotiable warehouse receipt that issues must be one that will be SOUGHT by all the banks, in all large financial centers, as an absolutely UNQUESTIONABLE "GILT EDGE" security.

A consumer abroad often desires to make purchases amounting to thousands and thousands of bales of cotton.

In that event, the purchaser abroad must be able to secure the necessary CASH to pay America for the cotton.

The purchaser, where such great values are involved, very often has NOT the necessary cash in hand to make such extensive purchases; BUT,

If he, the purchaser abroad, could, immediately after purchase, receive a negotiable warehouse receipt issued by a "CHAIN OF WAREHOUSES" properly conducted, he could frequently enter the cotton market and make extensive purchases without a very great original cash outlay.

THE COMPRESSION OF COTTON.

What is usually termed a "STANDARD BALE" of cotton, is one which measures:

27 inches wide,

54 inches long; and usually

48 inches in height, or THICKNESS,

as measured from edge to edge.

A "STANDARD BALE" is OFTEN called an "UNCOMPRESSED" bale of cotton, although it is ACTUALLY COMPRESSED, to a density of approximately $12\frac{1}{2}$ pounds to the cubic foot.

At present, a "STANDARD BALE" of cotton, after having been mutilated, sampled, and inspected, many times, is then USUALLY RE-COMPRESSED.

The RE-COMPRESSION of a bale becomes necessary, for two reasons:

FIRST:—The STANDARD BALE, having had its bagging thoroughly mutilated, requires to be RE-CLOTHED, and additional bagging placed on the bale to replace the bagging that it has lost, and replace the weight, lost by such mutilation and sampling.

SECOND:—The STANDARD BALE must be RE-COMPRESSED to a greater density for the purpose of economizing room.

Cotton of a "STANDARD BALE TYPE" occupies approximately twice the room justified by its weight.

If transported as a STANDARD BALE, and if charges for freight are assessed commensurate with the space occupied by it, the increased charge is very great, and the prices paid for

cotton to the producer, due to increased freight charges, would be proportionately less.

In the ordinary re-compression of cotton, a pressure of approximately 1,800 to 2,000 tons is applied to the bale.

When a bale of cotton is between the platens of a compress, of ANY MAKE, and the pressure of approximately 1,800 to 2,000 tons is exerted, the bale, WHILE IT IS UNDER THIS PRESSURE, is then re-compressed to a density of approximately 55 POUNDS to the cubic foot.

The bands, having each turned four corners of the edges of the bale, it is ABSOLUTELY IMPOSSIBLE to draw them taut, by hand.

While still under the pressure of 1,800 to 2,000 tons, EIGHT STEEL BANDS are usually passed through the channel openings of each platen and around the bale.

The ends of each band are united, or MADE ONE CONTINUOUS BAND, by means of an iron cotton tie or buckle.

The foregoing process accomplished, we have before us a STANDARD BALE OF COTTON between the platens of a powerful compress, and re-compressed to a density of approximately 55 pounds to the cubic foot, completely surrounded by eight iron bands, or straps, that do NOT lay close to the bale. The bands form eight elliptical iron belts, awaiting the expansion of the bale, when the pressure is released, which expansion, forces the straps to automatically tighten and lay close to the bale, at release of the pressure.

The releasing of the 1,800 to 2,000 tons of pressure, and the expansion of the bale of cotton, till checked by contact with the iron straps, INCREASES the bulk of the bale approximately, ONE-HALF, and necessarily decreases the DENSITY of 55 pounds to the cubic foot approximately, ONE-HALF.

The bale, after having expanded sufficiently to accommodate itself to the loose bands that encircle it, will usually show a density of, from $22\frac{1}{2}$ pounds to 25 pounds to the cubic foot, as computed by the measurements for the ascertaining of the cubical contents of a bale of cotton, in accordance with the rules of the SOUTH ATLANTIC AND GULF STEAMSHIP CONFERENCE, that are now in force.

The measurements of a bale of cotton may show an "OVER-ALL" cubic density of only $22\frac{1}{2}$ pounds to the cubic foot.

A STORY OF COTTON

"A"



TWO STANDARD BALES OF COTTON RE-
COMPRESSED IN THE USUAL MANNER WITH-
OUT ANY ATTACHMENT OR DEVICE BEING
USED FOR THE PURPOSE OF RETAINING
A GREAT PORTION OF THE DENSITY O-
RIGINALLY ACQUIRED WHEN THE BALE
WAS UNDER PRESSURE

But it is to be remembered that, on every bale of re-compressed cotton that shows only an "OVERALL" density of 22½ to 25 pounds per cubic foot, there are thirty-two points, namely, the points under the iron straps or bands, where they turn the corners of the bale, where there is cotton with a density of 35 to 40 pounds per cubic foot. This higher density remains from the time of compression to the time of the removal of the bands.

The amount of cotton at each of the thirty-two points, that maintains a density of, from 35 pounds to 40 pounds to the cubic foot, is rarely LESS than one pound, and OFTEN, as many as five pounds.

In the past thirty or forty years, there have been very many devices perfected for the purpose of TIGHTENING, or PULLING TAUT, the iron bands or straps that surround a bale of cotton while between the platens of a compress, and for the purpose of retaining a greater proportion of the 55 pounds density to the cubic foot than is now maintained after the bale expands and accommodates itself to the iron bands that are loosely surrounding it while under pressure.

A great many of what were termed "BAND PULLERS" that were operated by steam, compressed air and hydraulic power, have been patented, and have been EMINENTLY successful, insofar as the tightening of the band was concerned, and the RETENTION of much of the approximate 55 pounds density originally acquired.

These mechanical devices, although they have been PERFECTLY successful, insofar as the tightening of the band, or strap, is concerned, were found in every instance, to be so VERY SLOW in their operation that their use was discontinued.

There are, at present, some machines and some devices that maintain a great density in a bale of compressed cotton and are practical.

Some of these machines ALTER the original shape of the STANDARD BALE, from an elliptical to an approximately rectangular shape, by two distinct actions, and with two SEPARATE pieces of machinery.

Other devices simply tighten the band automatically, while the bale is being compressed and, thus, retain the original elliptical shaped bale, with, however, a very great increased density.

We will address ourselves, as briefly as possible, to each of the RE-COMPRESSED bales, separately, and accompany our arguments by photographs of each bale so discussed, so that the merits of each method of compression may be freely and fairly analyzed by the cotton trade.

PHOTOGRAPH "A" is an exhibit of two "STANDARD" bales of cotton, RE-COMPRESSED as cotton is ORDINARILY re-compressed.

Approximately four pounds of additional bagging has been applied to each of these bales of cotton as ordered by the cotton shipper for the purpose of ENTIRELY COVERING each bale.

A marking patch, one-half of a second-hand sugar bag of approximately one pound in weight has been applied to ONE edge of each bale.

A patch of rewoven bagging of approximately three pounds has been applied to the other edge of each bale.

Bale No. 1 in Photograph "A" shows the edge of the bale, that has been re-compressed in the ORDINARY MANNER, with the MARKING PATCH applied.

Bale No. 2 in Photograph "A" shows the opposite edge of another STANDARD BALE, re-compressed in an ORDINARY MANNER, with a patch of rewoven bagging, of three pounds in weight, applied.

These two bales were, BEFORE RE-COMPRESSION, each of a measurement, of 27 inches wide, 54 inches long and 48 inches in thickness.

After re-compression, as shown in the photograph, the measurements are:

Bale No. 1:—30 inches wide, 58 inches long, 20 inches in thickness.

Bale No. 2:—30 inches wide, 60 inches long, 22 inches in thickness.

You will note that these bales photographed, show approximately 4% of the cotton in each bale is ENTIRELY exposed

and that approximately 96% of the cotton is OSTENSIBLY COVERED with wide open mesh bagging.

This is an ABSOLUTELY FAIR representation of bales of re-compressed cotton, IMMEDIATELY AFTER RE-COMPRESSSION, without the use of devices or attachments as a means of securing increased density, and, when four pounds of patching has been CAREFULLY applied, for the purpose of covering the NAKEDNESS, and the ENTIRELY EXPOSED portions of a bale of cotton, after re-compression.

Cotton re-compressed in this manner is usually re-compressed, at an AVERAGE rate of speed of 100 bales per hour.

PHOTOGRAPH "B" is an exhibit of two bales of cotton re-compressed by the use of the WEBB HIGH DENSITY ATTACHMENT.

Approximately four pounds of additional bagging has been applied to each of these bales of cotton as ordered by the cotton shipper, for the purpose of ENTIRELY covering each bale.

A marking patch, one-half of a second-hand sugar bag, of approximately one pound in weight has been applied to ONE edge of each bale.

A patch of re woven bagging of approximately three pounds in weight has been applied to the other edge of each bale.

Bale No. 1 in Photograph "B" shows the edge of the bale, with a MARKING PATCH applied.

Bale No. 2 in Photograph "B" shows the opposite edge of another "STANDARD BALE" re-compressed by means of a WEBB HIGH DENSITY ATTACHMENT, with a patch of re woven bagging, of three pounds in weight, applied.

These two bales were, BEFORE RE-COMPRESSION, each of a measurement, of 27 inches wide, 54 inches long and 48 inches in thickness.

After re-compression, as shown in the photograph, the measurements are:

Bale No. 1:—23 inches wide, 59 inches long, 21 inches in thickness.

Bale No. 2:—24 inches wide, 59 inches long, 19 inches in thickness.

A STORY OF COTTON

"B"



TWO STANDARD BALES OF COTTON
RECOMPRESSED BY MEANS OF THE
WEBB HIGH DENSITY ATTACHMENT

You will note that these bales photographed, show an ENTIRE EXPOSURE of approximately 22% of each bale so re-compressed, and show approximately 78% of each bale OSTENSIBLY COVERED with wide open mesh bagging.

This INCREASE of approximately 18% of ENTIRELY EXPOSED SURFACE in bales of cotton re-compressed by the use of the WEBB HIGH DENSITY ATTACHMENT, over and above the ENTIRE EXPOSURE of approximately 4% that obtains when cotton is re-compressed in the ORDINARY MANNER, is due to the fact that, in re-compressing cotton by the use of the WEBB HIGH DENSITY ATTACHMENT, there are TWO DISTINCT ACTIONS, that are exerted. The action of this High Density Attachment follows:

When the bands are removed from a "STANDARD BALE" of cotton, the bale is placed upon the lower platen of the compress. This lower platen is but twenty-two inches wide, while the width of a "STANDARD BALE" is thirty inches.

Immediately upon the bale of cotton having been placed on its edge, on the lower platen of the compress, two heavy iron doors are simultaneously, by powerful machinery, forced against both sides of the bale.

By means of this SIDE PRESSURE, a "STANDARD BALE" of an original width of 27 inches, is reduced to 22 inches, and accommodates itself to the width of the lower platen of the press.

While the action of the side door pressure is being exerted, there being no resisting influence at the TOP EDGE of the bale, this top edge is thus lifted, and the two pieces of bagging that cover the two edges of a "STANDARD BALE" NATURALLY SEPARATE THE bagging, that originally covered the two edges of the bale, SEPARATE, or move FURTHER APART, of necessity.

The bale of cotton, owing to there being no resisting force at either head to prevent it, usually increases in length from one to four inches, when the side pressure is exerted.

When the up and down pressure of ONLY 1,800 to 2,000 tons is then exerted on the edges of the bale, while it is STILL held in the position it was placed in by the side pressure, the

two edges of bagging that parted, when the SIDE PRESSURE WAS exerted, can not possibly unite on the flat side of the bale as is the case in ordinary compression.

The illustrations are an ABSOLUTELY FAIR representation of bales of cotton, IMMEDIATELY AFTER RE-COMPRESSION, that are CAREFULLY re-compressed by the use of the WEBB HIGH DENSITY ATTACHMENT and when four pounds of patching have been CAREFULLY applied for the purpose of covering the NAKEDNESS and the ENTIRELY EXPOSED portions of a bale of cotton after re-compression.

Cotton re-compressed in this manner is usually re-compressed at an AVERAGE rate of speed, of 70 bales per hour.

PHOTOGRAPH "C" is an exhibit of two bales of cotton re-compressed by the use of the TURNER HIGH DENSITY DEVICE.

Approximately four pounds of bagging have been applied to each of these bales of cotton as ordered by the cotton shipper, for the purpose of ENTIRELY covering each bale.

The marking patch, one-half of a second-hand sugar bag, of approximately one pound in weight, has been applied to ONE edge of each bale.

A patch of re-woven bagging of approximately three pounds has been applied to the other edge of each bale.

Bale No. 1 in Photograph "C" shows the edge of a bale with the MARKING PATCH applied.

Bale No. 2 in Photograph "C" shows the opposite edge of another "STANDARD BALE" re-compressed by using the TURNER HIGH DENSITY DEVICE, with a patch of re-woven bagging of three pounds in weight, applied.

These two bales were, BEFORE RE-COMPRESSION, each of a measurement, of 27 inches wide, 54 inches long and 48 inches in thickness.

After re-compression, as shown in the photograph, the measurements are:

Bale No. 1:—29 inches wide, 58 inches long, 15 inches in thickness.

A STORY OF COTTON

"C"



TWO STANDARD BALES OF COTTON
RECOMPRESSED BY MEANS OF THE
TURNER HIGH DENSITY DEVICE

Bale No. 2:—30 inches wide, 58 inches long, 15 inches in thickness.

You will note that each of the bales photographed shows ABSOLUTELY NO EXPOSURE OF COTTON, but shows the bale ENTIRELY OSTENSIBLY COVERED with the wide open mesh bagging that is now generally used.

This absence of exposure is due ENTIRELY to the fact that, by the use of the TURNER HIGH DENSITY DEVICE, a great portion of the density originally obtained in the bale of cotton while between the platens of the press, is retained; and the bale, although still elliptical in shape after leaving the press, is ENTIRELY OSTENSIBLY COVERED.

The illustration is an ABSOLUTELY FAIR representation of bales of cotton, IMMEDIATELY AFTER RE-COMPRESSSION, that are CAREFULLY re-compressed by the use of the TURNER HIGH DENSITY DEVICE and when four pounds of patching have been CAREFULLY applied, for the purpose of covering the NAKEDNESS and the ENTIRELY EXPOSED portions of a bale of cotton after re-compression.

Cotton compressed in this manner is usually re-compressed at an average rate of speed, of 90 bales per hour.

Many thousands of bales of cotton have, during the cotton season of 1918-1919 been shipped to the ports for foreign and coastwise shipment, and shippers have been FORCED by steamship companies to re-compress this cotton by the use of the WEBB HIGH DENSITY ATTACHMENT at an ADDITIONAL COST of \$1.00 per bale, or more, to the shipper.

THIS METHOD of re-compression entirely defeats the original intention of the shipper, of completely OSTENSIBLY COVERING his bale, and for which covering, as illustrated by Photograph "C," the shipper has already paid the compressor.

A STORY OF COTTON

"D"



THREE BALES OF COTTON COMPRESSED
BY A STANDARD COMPRESS.
THE TWO BALES STANDING ON HEAD ARE COVERED
WITH CLOSELY WOVEN BAGGINGS. THE BALE
ON ITS EDGE ON THE TRUCK IS COVERED WITH
JUTE BAGGING WITH WIDE OPEN MESHES. . . .

PHOTOGRAPH "D" is an exhibit of three bales of cotton compressed on what is termed a "STANDARD COMPRESS."

The STANDARD COMPRESS re-compresses a bale of cotton on all of its six sides and creates, after compressing, a rectangular bale of a very REGULAR shape, as evidenced by photograph. These bales are very desirable for the conservation of room.

ALL of the measurements of these bales were not obtainable, but the length is recorded as 48 inches.

These photographs show exposure of cotton on the flat sides of the bales.

GIN COMPRESSION.

NEARLY ALL of the WASTE, ALL of the mutilation, and a GREAT PORTION of the unnecessary expense with which cotton is and has been made to bear the burden, can be eliminated at the POINT where the bale is ORIGINALLY packaged.

A bale of cotton, originally compressed to a PROPER DENSITY at the gin, and a correct sample drawn from the ORIGINAL bale of cotton, PROPERLY SUPERVISED, and with a sufficient financial guarantee as to the sample honestly and fairly representing the bale, would FOREVER STOP, the unnecessary waste of cotton and INSURE a PERFECT package from ORIGIN to DESTINATION.

A great portion of the trading in cotton is NOW DONE on the basis of GUARANTEED SAMPLES AND WEIGHTS.

Many shippers DAILY purchase cotton, and ship their purchases to destination, on samples and weights GUARANTEED by the Seller. THEREFORE

It would seem that, if a guarantee, that would be accepted beyond question, is furnished to the Buyer by the Seller, covering the samples and the weights of the cotton, that he has purchased, the business of the Cotton Buyers and Shippers would not be MATERIALLY disturbed, if conducted on this basis.

If cotton were compressed at the gin and offered to the trade, either as a ROUND BALE OF COTTON or a RECTANGULAR BALE OF COTTON, it cannot be denied that the producer, the merchant and the manufacturer would ALL be GREATLY benefited; BUT

A STORY OF COTTON



EIGHT BALES OF ROUND COTTON COMPRESSED BY AN AMERICAN ROUND BALE COMPRESS.
 THESE BALES ARE SHOWN AS ENTIRELY COVERED.
 THE AVERAGE DENSITY OF EACH BALE IS APPROXIMATELY 39 LBS. TO THE CUBIC FOOT.
 EACH BALE IS SAMPLED AT THE TIME OF COMPRESSION. COTTON OF THIS CHARACTER IS ALWAYS SOLD ON GUARANTEED SAMPLES AND GUARANTEED WEIGHTS.

A STORY OF COTTON

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"CLOSE-UP" VIEW OF A BALE OF GIN COMPRESSED COTTON OF THE AMERICAN ROUND BALE TYPE, BELONGING TO THE SOUTHERN ROUND BALE PRESS COMPANY. — — — — — LENGTH 35", DIAMETER 20", WEIGHT 254 LBS., DENSITY 39.3 LBS. PER CUBIC FOOT, WEIGHT OF COVERING 3 LBS. PER BALE, NO TIES. BALES OF THIS CHARACTER ARE SOLD ON GUARANTEED SAMPLES AND WEIGHTS; THEREFORE, IT IS NOT NECESSARY TO MUTILATE THE BALE FOR THE PURPOSE OF SAMPLING AND INSPECTION.

It is bound to be admitted, that such a DRASTIC change in the shape, or in the covering of a bale of cotton, would IMMEDIATELY DRAW severe criticism from each individual industry, that would become FINANCIALLY affected by this change in the method of handling cotton.

The ONE industry that probably would be the loudest in the denunciation of the method, would be the compressor of cotton, as the profit derived from the actual re-compression of cotton by a compressor, is quite an item, particularly, if the compressor has always looked solely to the profit derived from the re-compressing of cotton for his revenues for conducting a compress and storage enterprise.

If the industries of ALL of the compressors of cotton are to be affected by gin compression being adopted, and, if their re-compressing machinery should become obsolete and unnecessary, they must always bear in mind that, as an OFF-SET for this lack of revenue from re-compressing cotton, they need ONLY to enlarge and modernize their storage facilities.

The original bale of cotton, as placed on storage, when gin compressed, would occupy only one-half of the room as does a STANDARD BALE, and the compressor's profit that would be derived from storage would be doubled and would ENTIRELY offset the profit that might be lost by the disuse of re-compressing machinery.

Another interest that would, no doubt, OPPOSE such a DRASTIC change, would be the manufacturer of steel bands, provided that the ROUND GIN COMPRESSED BALE was given preferred consideration.

At present, there are manufactured, each year, at the steel plants, approximately seventy-eight million iron bands or straps, and the same number of iron buckles.

If the RECTANGULAR BALE OF GIN COMPRESSING WERE favorably considered, each band now manufactured of approximately eleven feet in length, would then be reduced to eight feet in length, and the market for the unnecessary three feet of each iron band of the seventy-eight million, that they now manufacture, would no longer obtain.

A STORY OF COTTON



SHOWING TWO RECTANGULAR GIN COMPRESSED BALES
OF COTTON COVERED WITH BURLAP BAGGING, IMMEDIATELY
AFTER COMPRESSION, COMPRESSED BY THE USE
OF AN AMERICAN COTTON GIN COMPRESS
COMPANY MACHINE.

EACH OF THESE BALES MEASURE 20" X 25" X 52"
BALES OF THIS CHARACTER ARE SOLD ON GUARAN-
TEED SAMPLES AND USUALLY GUARANTEED
WEIGHTS.

If the bales of cotton were compressed at the gin as **ROUND BALES OF COTTON**, which bales are becoming **EXCEEDINGLY POPULAR THROUGHOUT THE ENTIRE WORLD**, NO iron bands whatever would be necessary, as a bale of cotton compressed at the gin in this manner does NOT expand after compression, and, therefore, does NOT require an **IRON BAND** to retain density, as it is only necessary to sew around this original package a **VERY LIGHT WEIGHT BAGGING** of the character of what is known as **BURLAP BAGGING**.

Such a character of bagging is woven with its meshes so close together that, when a bale of cotton is gin compressed, as is a **ROUND BALE OF COTTON**, and the bagging **PROPERLY** and **CAREFULLY** applied, there is not one ounce of cotton exposed.

The average weight of the present **STANDARD BALE** of cotton is approximately 520 pounds, while the weight of the **ROUND BALE** runs from 250 to 300 pounds; and, being such a light package, may be handled without the use of a cotton hook; thereby, preventing the disastrous mutilation to the bagging commonly suffered by the **STANDARD BALE**.

FINALLY

The members of the **INTERNATIONAL COTTON CONFERENCE**, that is to be held at New Orleans, Louisiana, U. S. A., October 13, 14, 15, and 16, 1919, are the ones that should analyze these abuses, if they consider that abuses exist, to cotton lint or to a cotton bale, from its birth, as an open boll of cotton, to its manufacture and its delivery in a manufactured form to the consumer.

The Convention may **ACCEPT** and **ENDORSE** the two pound bagging with a wide open mesh that now **OSTENSIBLY COVERS** about one-third of a bale of cotton.

They may endorse a bagging with an even **WIDER MESH** or a closer woven bagging.

They may consider that, as a custom of years, standing has ESTABLISHED THE FACT that the bagging MUST be mutilated, and the cotton wasted, these mutilations and the wastage of cotton lint must STILL continue, undisturbed.

Their opinions as regards the most acceptable package at destination, either a LOW DENSITY or a HIGH DENSITY RE-COMPRESSED BALE will, no doubt, largely govern and control THIS feature.

They may ignore altogether GIN COMPRESSING as impractical and may state, in no uncertain terms, by a majority vote, that a fully guaranteed sample, ORIGINALLY DRAWN AT THE GIN, whether supervised by the United States Authorities or by individuals is impractical and impossible; OR

They may vote their preference as to the ROUND GIN PRESSED BALE or the RECTANGULAR GIN PRESSED BALE.

This Convention may adopt a CERTAIN NUMBER of changes in the handling of cotton, or may not touch on the subject in any way.

The creation of a bale of cotton of a more desirable type than the one at present obtaining has long since ceased to be a subject that should be controlled by CERTAIN LOCALITIES or INDIVIDUAL INTERESTS.

This matter has become a NATIONAL QUESTION, and if not completely solved at the coming meeting of the INTERNATIONAL COTTON CONFERENCE, will be solved by GOVERNMENTAL INTERFERENCE and by GOVERNMENT DICTATION some time in the near future.

If the writer is correct in his assumption, it would apparently, be wisdom of the highest order for the Convention, in October, to devote some of its attention to the anticipation of the possible Governmental interference and adopt such rules for the creation of a cotton bale and the proper handling of it, as would insure favorable, instead of adverse, criticism for America's "GOLD PRODUCING COMMODITY".

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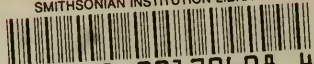








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